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IFW

February 1, 2005

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Re: U.S. Patent Application No. 10/816,514  
For: *IMPLEMENTATION OF MICROFLUIDIC COMPONENTS, INCLUDING  
MOLECULAR FRACTIONATION DEVICES, IN A MICROFLUIDIC  
SYSTEM*

Inventors: John R. Gilbert, *et al.*

Filed: March 31, 2004

Our Ref. No.: TGZ-030

Dear Sir:

I enclose herewith for filing in the above-identified application the following:

1. Information Disclosure Statement;
2. PTO Form SB/08;
3. Copies of selected references cited in PTO Form SB/08 (23);
4. A Return Postcard.

No additional costs are believed to be due in connection with the filing of this Information Disclosure Statement. However, please charge any necessary fees in connection with the enclosed statement to our Deposit Order Account No. 12-0080. For this purpose, a duplicate of this sheet is attached.

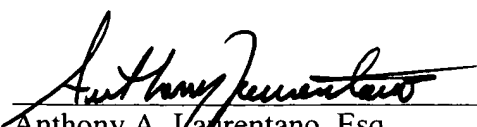
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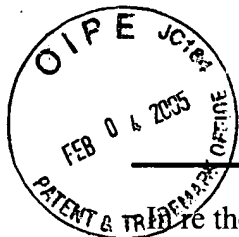
February 1, 2005

Date

Anthony A. Laurentano, Esq. Registration No. 38,220

Respectfully submitted,  
LAHIVE & COCKFIELD, LLP

  
Anthony A. Laurentano, Esq.  
Registration No. 38,220  
Attorney for Applicants



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re the application of: John R. Gilbert, *et al.*

Serial No. 10/816,514

Filed: March 31, 2004

For: *IMPLEMENTATION OF MICROFLUIDIC COMPONENTS, INCLUDING MOLECULAR FRACTIONATION DEVICES, IN A MICROFLUIDIC SYSTEM*

Attorney Docket No. TGZ-030

Group Art Unit: 1753

Examiner: Not Yet Assigned

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

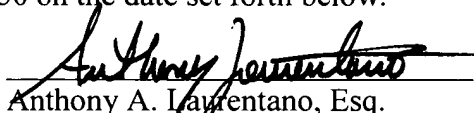
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February 1, 2005

Date of Signature and of Mail Deposit

By:

  
Anthony A. Laurentano, Esq.  
Registration No. 38,220  
Attorney for Applicants

INFORMATION DISCLOSURE STATEMENT


Dear Sir:

Applicants and their Attorney are aware of the following publications and information, listed on the attached PTO Form SB/08, and in accordance with 37 CFR §1.97 hereby submit these publications for the Examiner's consideration. A copy of each cited publication is enclosed. Copies of cited U.S. patents and U.S. publications (Reference ID Nos. A1-A30) are not enclosed with this statement. Copies of non-patent literature (Reference ID Nos. B1-C4) are enclosed in accordance with 37 CFR 1.98(a)(2).

This statement is not to be interpreted as a representation that the cited publications are material, that an exhaustive search has been conducted, or that no other relevant information exists. Nor shall the citation of any publication herein be construed *per se* as a representation that such publication is prior art. Moreover, Applicants understand that the Examiner will make an independent evaluation of the cited publications.

Under 37 CFR § 1.97(b)(3), no additional costs are believed to be due in connection with the filing of this disclosure. If, however, a first Office Action on the merits issues in this application bearing a mailing date prior to the date of this Information Disclosure Statement, please charge the appropriate fee as required under 37 CFR §1.17(p) to our Deposit Order Account No. 12-0080.

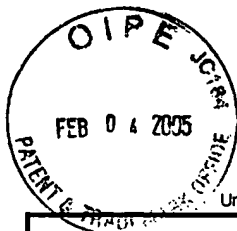
Respectfully submitted,  
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Date: February 1, 2005

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<b>Substitute for form 1449A/B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	10/816,514	
			Filing Date	March 31, 2004	
			First Named Inventor	John R. Gilbert	
			Art Unit	1753	
			Examiner Name	Not Yet Assigned	
Sheet	1	of	3	Attorney Docket Number	TGZ-030

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	A1	5,565,365	10-15-1996	Glass	
	A2	5,770,029	06-23-1998	Nelson, <i>et al.</i>	
	A3	5,922,591	07-13-1999	Anderson, <i>et al.</i>	
	A4	5,922,210	07-13-1999	Brody, <i>et al.</i>	
	A5	5,948,227	09-07-1999	Dubrow	
	A6	5,948,441	09-07-1999	Lenk, <i>et al.</i>	
	A7	5,962,081	10-05-1999	Ohman, <i>et al.</i>	
	A8	5,993,661	11-30-1999	Ruckenstein, <i>et al.</i>	
	A9	6,007,775	12-28-1999	Yager	
	A10	6,042,709	03-28-2000	Parce, <i>et al.</i>	
	A11	6,046,056	04-04-2000	Parce, <i>et al.</i>	
	A12	6,051,380	04-18-2000	Sosnowski, <i>et al.</i>	
	A13	6,139,831	10-31-2000	Shivashankar, <i>et al.</i>	
	A14	6,156,527	12-05-2000	Schmidt, <i>et al.</i>	
	A15	6,168,948 B1	01-02-2001	Anderson, <i>et al.</i>	
	A16	6,187,190 B1	02-13-2001	Smith, <i>et al.</i>	
	A17	6,197,595 B1	03-06-2001	Anderson, <i>et al.</i>	
	A18	6,197,599 B1	03-06-2001	Chin, <i>et al.</i>	
	A19	6,221,600 B1	04-24-2001	MacLeod, <i>et al.</i>	
	A20	6,306,590 B1	10-23-2001	Mehta, <i>et al.</i>	
	A21	6,306,628 B1	10-23-2001	Rothschild, <i>et al.</i>	
	A22	6,316,266 B1	11-13-2001	Nelson	
	A23	6,429,025 B1	08-06-2002	Parce, <i>et al.</i>	
	A24	6,432,290 B1	08-15-2002	Harrison, <i>et al.</i>	
	A25	6,440,725 B1	08-27-2002	Pourahmadi, <i>et al.</i>	
	A26	6,444,461 B1	09-03-2002	Knapp, <i>et al.</i>	
	A27	6,482,607 B1	11-19-2002	Reymond, <i>et al.</i>	
	A28	6,488,897 B2	12-03-2002	Dubrow, <i>et al.</i>	
	A29	6,498,039 B2	12-24-2002	Nelson	
	A30	6,531,283 B1	03-11-2003	Kingsmore, <i>et al.</i>	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/816,514
				Filing Date	March 31, 2004
				First Named Inventor	John R. Gilbert
				Art Unit	1753
				Examiner Name	Not Yet Assigned
Sheet	2	of	3	Attorney Docket Number	TGZ-030

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>	
	B1	Adam, <i>et al.</i> "Chemical strategies for functional proteomics." <i>Mol Cell Proteomics</i> . 2002 Oct; 1(10):781-90.		
	B2	Adam, <i>et al.</i> "Proteomic profiling of mechanistically distinct enzyme classes using a common chemotype." <i>Nat Biotechnol</i> . 2002 Aug; 20(8):805-9.		
	B3	Blagoev, <i>et al.</i> "A proteomics strategy to elucidate functional protein-protein interactions applied to EGF signaling." <i>Nat Biotechnol</i> . 2003 Mar; 21(3):315-8.		
	B4	Fey, <i>et al.</i> "2D or not 2D. Two-dimensional gel electrophoresis." <i>Curr Opin Chem Biol</i> . 2001 Feb; 5(1):26-33.		
	B5	Gao, <i>et al.</i> "Integrated microfluidic system enabling protein digestion, peptide separation, and protein identification." <i>Anal. Chem</i> . 2001; 73:2648-55.		
	B6	Gorg, <i>et al.</i> "The current state of two-dimensional electrophoresis with immobilized pH gradients." <i>Electrophoresis</i> . 2000 Apr; 21(6):1037-53.		
	B7	Graves, <i>et al.</i> "Molecular biologist's guide to proteomics." <i>Microbiol Mol Biol Rev</i> . 2002 Mar; 66(1):39-63.		
	B8	Gygi, <i>et al.</i> "Evaluation of two-dimensional gel electrophoresis-based proteome analysis technology." <i>Proc Natl Acad Sci USA</i> . 2000 Aug 15; 97(17):9390-5.		
	B9	Jessani, <i>et al.</i> "Enzyme activity profiles of the secreted and membrane proteome that depict cancer cell invasiveness." <i>Proc Natl Acad Sci USA</i> . 2002 Aug 6; 99(16):10335-40.		
	B10	Jiang, <i>et al.</i> "Integrated plastic microfluidic devices with esi-ms for drug screening and residue analysis." <i>Anal. Chem</i> . 2001; 73:2048-53.		
	B11	Joberty, <i>et al.</i> "Borg proteins control septin organization and are negatively regulated by Cdc42." <i>Nat Cell Biol</i> . 2001 Oct; 3(10):861-6.		
	B12	Kidd, <i>et al.</i> "Profiling serine hydrolase activities in complex proteomes." <i>Biochemistry</i> . 2001 Apr 3; 40(13):4005-15.		
	B13	Lilley, <i>et al.</i> "Two-dimensional gel electrophoresis: recent advances in sample preparation, detection and quantitation." <i>Curr Opin Chem Biol</i> . 2002 Feb; 6(1):46-50.		
	B14	Mann, <i>et al.</i> "Analysis of proteins and proteomes by mass spectrometry." <i>Annu Rev Biochem</i> . 2001; 70:437-73.		
	B15	Mann, <i>et al.</i> "Proteomic analysis of post-translational modifications." <i>Nat Biotechnol</i> . 2003 Mar; 21(3):255-61.		
	B16	Oda, <i>et al.</i> "Enrichment analysis of phosphorylated proteins as a tool for probing the phosphoproteome." <i>Nat Biotechnol</i> . 2001 Apr; 19(4):379-82.		
	B17	Ong, <i>et al.</i> "An evaluation of the use of two-dimensional gel electrophoresis in proteomics." <i>Biomol Eng</i> . 2001 Nov; 18(5):195-205.		
	B18	Pandey, <i>et al.</i> "Analysis of receptor signaling pathways by mass spectrometry: identification of vav-2 as a substrate of the epidermal and platelet-derived growth factor receptors." <i>Proc Natl Acad Sci USA</i> . 2000 Jan 4; 97(1):179-84.		
	B19	Sydor, <i>et al.</i> "Protein expression profiling arrays: tools for the multiplexed high-throughput analysis of proteins." <i>Proteome Sci</i> . 2003 Jun 10; 1(1):3.		

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	C1	Wang, <i>et al.</i> "Integration of polymeric membranes with microfluidic networks for bioanalytical applications." <i>Electrophoresis</i> . 2001; 22:3857-67.	
	C2	Wang, <i>et al.</i> "High resolution chiral separation using microfluidics-based membrane chromatography." <i>Journal of Chromatography A</i> 942. 2002; 115-22.	
	C3	Xiang, <i>et al.</i> "An integrated microfabricated device for dual microdialysis and on-line ESI-ion trap mass spectrometry for analysis of complex biological samples." <i>Anal. Chem.</i> 1999; 71:1485-90.	
	C4	Xu, <i>et al.</i> "A microfabricated dialysis device for sample cleanup in electrospray ionization mass spectrometry." <i>Anal. Chem.</i> 1998; 70:3553-6.	

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<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

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